

Issue Tables

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Getting Ready for College: Financial Concerns and Preparation Among the High School Senior Class of 2003-04

Introduction

With college tuition rising significantly over the past three decades (Snyder, Dillow, and Hoffman 2009), students and parents have become increasingly concerned about college affordability, financial aid, and financial preparations for postsecondary education. This set of Issue Tables, one of a series examining students' preparation for college,¹ draws upon data from the Education Longitudinal Study of 2002 (ELS:02) to address these concerns.

Tables 1 and 2 present how high school seniors and their parents rated the importance of low college expenses and the availability of financial aid in choosing a college, distinguishing between students who planned to attend 2-year or 4-year postsecondary institutions.

Tables 3 and 4 examine the various financial preparations that parents had made as of 2002 for their children's future education. Table 3 looks at parents of students who planned to attend 4-year postsecondary institutions after high school, and table 4 focuses on parents of students who planned to attend 2-year institutions.

Table 5 examines whether high school seniors in 2004 who had applied to college by 2006 had applied for financial aid and, if not, their reasons for not applying.

¹ Three other sets of Issue Tables (see Related NCES Reports) examine students' academic preparation; postsecondary expectations and plans; and steps toward postsecondary enrollment. These tables are available at <http://nces.ed.gov/pubsearch/>.

Estimates in all tables are shown for all specified students in the high school senior class of 2004 and by a wide range of student, family, and high school characteristics.²

Data

All information presented in these Issue Tables is based on data from the Education Longitudinal Study of 2002 (ELS:02). ELS:02 followed a nationally representative cohort of 2002 high school sophomores as they progressed through high school and then into postsecondary education and/or work. After the initial data collection in 2002, data were collected again in 2004, when most students were high school seniors, and in 2006, when most had entered postsecondary education or the workforce. Seniors in 2004 who were not in the base-year sample were given a chance of selection into the sample. This procedure, referred to as “freshening,” made the ELS spring 2004 senior cohort nationally representative of the 12th-grade class. The survey collected high school transcripts that covered students’ 4 years of coursetaking, administered standardized tests, and surveyed students, parents, teachers, and schools. It thus provides a rich source of information on how this cohort prepared for college while attending high school.

The analysis sample for table 1 consists of all high school seniors in spring 2004 who planned to attend a 2- or 4-year postsecondary institution after high school. Tables 2–4 look at parents’ financial concerns and preparations. Because the parent survey was conducted in 2002 when the students were sophomores, the sample for tables 2–4 is restricted to 2004 seniors from the 2002 sophomore cohort who planned to attend a 2- or 4-year postsecondary institution after high school. The sample for table 5 consists of all 2004 seniors who had applied to college by 2006. For more detailed information on ELS:02, see <http://nces.ed.gov/surveys/ELS2002/>.

References

Ingels, S.J., Planty, M., and Bozick, R. (2005). *A Profile of the American High School Senior in 2004: A First Look—Initial Results from the First Follow-up of the Educational Longitudinal Study of 2002 (ELS:02)* (NCES 2006-348). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC.

Snyder, T.D., Dillow, S.A., and Hoffman, C.M. (2009). *Digest of Education Statistics, 2008* (NCES 2009-020). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC.

U.S. Department of Education, National Center for Education Statistics. (2003). *NCES Statistical Standards* (NCES 2003-601). Washington, DC.

Related NCES Reports

Academic Preparation for College in the High School Senior Class of 2003–04 (NCES 2010-169)

The High School Senior Class of 2003–04: Steps Toward Postsecondary Enrollment (NCES 2010-203)

Postsecondary Expectations and Plans for the High School Senior Class of 2003–04 (NCES 2010-170)

² For more information on student, family, and high school characteristics, see Ingels, Planty, and Bozick (2005).

National Center for Education Statistics

Table 1. Among high school seniors who planned to attend 2- or 4-year postsecondary institutions after high school, percentage rating college expenses and the availability of financial aid as very important in choosing an institution to attend, by selected student, family, and high school characteristics: 2004

Selected student, family, and high school characteristics	Students who planned to attend 4-year institutions				Students who planned to attend 2-year institutions			
	Low college expenses are very important		Availability of financial aid is very important		Low college expenses are very important		Availability of financial aid is very important	
	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI
Total	31.4	[30.0–32.8]	55.8	[54.1–57.5]	47.3	[45.0–49.6]	62.7	[60.3–65.0]
Sex								
Male	30.1	[28.2–32.1]	49.8	[47.6–52.1]	42.4	[39.2–45.6]	54.2	[50.7–57.7]
Female	32.5	[30.8–34.3]	61.0	[59.0–63.0]	51.7	[48.7–54.8]	70.2	[67.5–72.9]
Race/ethnicity ¹								
White	25.1	[23.5–26.7]	48.3	[46.4–50.3]	44.4	[41.3–47.4]	56.4	[53.3–59.5]
Black	52.4	[48.5–56.3]	77.0	[73.7–80.3]	59.1	[53.2–65.0]	75.6	[70.5–80.7]
Hispanic	40.6	[36.9–44.3]	70.5	[66.6–74.4]	47.7	[42.7–52.7]	70.8	[66.4–75.2]
Asian	31.6	[27.5–35.8]	57.3	[52.7–61.8]	36.9	[29.0–44.8]	59.3	[51.5–67.2]
American Indian	35.4	[22.2–48.6]	68.3	[55.6–81.0]	†	[†]	†	[†]
Two or more races	36.8	[30.2–43.4]	59.5	[52.9–66.1]	58.5	[48.2–68.8]	68.1	[58.3–77.9]
First language learned to speak as a child								
Non-English	43.7	[40.5–46.9]	69.4	[65.7–73.0]	46.0	[40.6–51.4]	68.4	[62.8–74.0]
English	29.8	[28.3–31.2]	54.0	[52.2–55.7]	47.6	[45.1–50.1]	61.5	[58.9–64.1]
Highest level of parents' education								
High school or less	42.3	[39.0–45.6]	68.1	[65.1–71.1]	50.0	[45.9–54.2]	68.9	[65.4–72.4]
Some college	34.6	[32.4–36.7]	62.8	[60.6–65.1]	48.5	[44.9–52.0]	61.9	[58.2–65.7]
College graduation	29.1	[26.8–31.5]	51.3	[48.7–53.9]	41.9	[36.8–47.1]	58.3	[53.3–63.3]
Graduate/professional degree	21.5	[19.1–23.8]	42.1	[39.1–45.2]	43.2	[36.0–50.3]	52.9	[45.3–60.4]
Family income in 2001								
\$35,000 or lower	44.5	[41.9–47.0]	73.8	[71.3–76.3]	48.9	[45.3–52.4]	69.7	[66.1–73.3]
\$35,001–75,000	32.9	[30.9–34.9]	59.9	[57.7–62.0]	49.2	[45.4–53.0]	62.4	[58.9–66.0]
More than \$75,000	20.6	[18.7–22.5]	38.5	[36.0–40.9]	40.1	[35.3–44.8]	48.7	[43.5–53.8]
Family composition								
Mother and father	27.4	[25.9–28.9]	50.5	[48.6–52.4]	46.8	[43.5–50.1]	58.6	[55.3–61.8]
Mother or father and guardian	35.7	[32.1–39.3]	62.3	[58.6–65.9]	47.9	[42.3–53.4]	63.3	[58.2–68.3]
Single parent (mother or father)	39.3	[36.1–42.4]	66.8	[63.8–69.9]	48.3	[43.3–53.3]	69.7	[65.4–74.0]
Other	51.8	[44.0–59.6]	74.0	[67.0–80.9]	46.9	[38.6–55.2]	71.2	[62.9–79.6]
Highest mathematics course level								
Pre-algebra or below	50.4	[41.8–59.1]	67.7	[58.9–76.4]	45.2	[37.8–52.5]	61.5	[54.5–68.6]
Algebra I/geometry	39.3	[35.2–43.4]	62.8	[58.9–66.6]	44.7	[40.8–48.6]	59.8	[55.8–63.9]
Algebra II	37.2	[34.4–40.0]	58.7	[55.6–61.9]	47.3	[42.8–51.9]	64.3	[59.9–68.6]
Trigonometry/analytic geometry/statistics	31.2	[28.0–34.4]	55.9	[52.7–59.2]	52.3	[45.7–58.9]	62.2	[56.3–68.1]
Pre-calculus/calculus	24.3	[22.5–26.2]	51.0	[48.7–53.3]	53.4	[46.1–60.8]	69.1	[62.2–76.0]

See notes at end of table.

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Table 1. Among high school seniors who planned to attend 2- or 4-year postsecondary institutions after high school, percentage rating college expenses and the availability of financial aid as very important in choosing an institution to attend, by selected student, family, and high school characteristics: 2004—Continued

Selected student, family, and high school characteristics	Students who planned to attend 4-year institutions				Students who planned to attend 2-year institutions			
	Low college expenses are very important		Availability of financial aid is very important		Low college expenses are very important		Availability of financial aid is very important	
	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI
Highest science course level								
Low-level science	41.6	[29.8–53.3]	55.8	[42.7–68.9]	41.3	[31.9–50.8]	56.7	[48.6–64.8]
Secondary physical science/basic biology	30.8	[20.7–41.0]	58.3	[44.9–71.7]	38.0	[29.5–46.4]	58.1	[48.7–67.5]
General biology	38.4	[35.1–41.8]	59.7	[56.1–63.2]	47.3	[43.3–51.3]	61.7	[58.0–65.5]
Chemistry I or physics I	32.0	[29.6–34.5]	57.7	[54.9–60.4]	50.6	[46.8–54.4]	65.4	[61.2–69.5]
Chemistry I and physics I	26.9	[24.1–29.7]	50.3	[46.6–53.9]	46.7	[38.0–55.4]	61.7	[52.3–71.0]
Chemistry II, physics II, or advanced biology	26.5	[24.0–28.9]	53.6	[50.8–56.4]	48.7	[41.0–56.4]	64.5	[56.7–72.4]
High-level academic coursework								
Did not complete	34.7	[33.0–36.5]	58.2	[56.1–60.3]	47.2	[44.6–49.7]	62.4	[59.7–65.0]
Completed	24.8	[22.8–26.9]	51.0	[48.5–53.5]	50.1	[41.9–58.4]	64.2	[56.7–71.8]
Mathematics achievement test in senior year								
Lowest quarter	48.0	[44.3–51.8]	72.3	[68.9–75.7]	46.3	[42.8–49.8]	66.2	[62.8–69.7]
Middle two quarters	33.3	[31.6–35.0]	57.7	[55.6–59.9]	47.3	[44.1–50.6]	60.9	[57.5–64.2]
Highest quarter	22.3	[20.5–24.2]	46.6	[44.1–49.2]	51.7	[44.0–59.4]	57.9	[50.3–65.6]
High school GPA								
2.0 or lower	46.9	[42.0–51.7]	62.8	[57.6–68.0]	43.9	[39.1–48.7]	59.5	[54.8–64.1]
2.1–3.0	34.1	[31.8–36.5]	57.4	[54.9–60.0]	47.0	[44.0–50.0]	61.8	[58.5–65.0]
Higher than 3.0	26.5	[24.9–28.2]	53.1	[51.0–55.2]	52.7	[48.1–57.4]	68.2	[63.9–72.4]
Parent's 2002 educational expectations for students								
High school or less	42.6	[30.9–54.2]	64.2	[†]	44.8	[33.6–56.1]	57.8	[†]
Some college	40.3	[32.7–48.0]	65.3	[57.9–72.6]	45.7	[38.8–52.5]	58.7	[52.5–64.8]
College graduation	31.6	[29.7–33.5]	54.4	[52.3–56.6]	44.1	[41.0–47.3]	60.2	[57.0–63.3]
Graduate/professional degree	30.4	[28.5–32.2]	56.1	[53.9–58.4]	53.0	[48.9–57.1]	68.6	[64.6–72.6]
Sector of high school last attended								
Public	32.6	[31.1–34.1]	57.4	[55.6–59.3]	47.5	[45.1–49.8]	63.0	[60.6–65.5]
Catholic	22.0	[19.4–24.5]	47.9	[44.7–51.0]	41.7	[33.3–50.0]	52.5	[43.3–61.7]
Other private	20.9	[15.9–25.8]	36.8	[31.4–42.2]	46.5	[35.0–58.0]	55.6	[46.5–64.6]
Urbanicity of high school last attended								
Urban	36.7	[34.3–39.1]	60.2	[57.3–63.1]	48.7	[45.1–52.4]	68.6	[64.9–72.4]
Suburban	27.6	[25.7–29.5]	52.9	[50.4–55.5]	47.1	[43.7–50.5]	59.3	[55.8–62.8]
Rural	31.3	[28.2–34.4]	55.2	[52.3–58.1]	45.6	[40.8–50.3]	61.5	[56.5–66.4]

† Not applicable.

‡ Reporting standards not met. (Too few cases for a reliable estimate.)

¹ Black includes African American, Hispanic includes Latino, Asian includes Native Hawaiian or other Pacific Islander, and American Indian includes Alaska Native. All race categories exclude individuals of Hispanic or Latino origin.

NOTE: See the Technical Notes for the definition of 95% CI (confidence interval). This table shows, for example, that 31.4 percent of high school seniors who planned to attend a 4-year postsecondary institution rated low college expenses as very important in choosing an institution to attend. Estimates in this table are based on all high school seniors in spring 2004 who planned to attend a 2- or 4-year postsecondary institution after high school.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Education Longitudinal Study of 2002 (ELS:02), "Base year 2002" and "First Follow-up, 2004."

National Center for Education Statistics

Table 2. Among high school seniors from the 2002 sophomore cohort who planned to attend 2- or 4-year postsecondary institutions after high school, percentage whose parents reported in 2002 that college expenses and the availability of financial aid were very important in choosing an institution, by selected student, family, and high school characteristics: 2004

Selected student, family, and high school characteristics	Students who planned to attend 4-year institutions				Students who planned to attend 2-year institutions			
	Low college expenses are very important		Availability of financial aid is very important		Low college expenses are very important		Availability of financial aid is very important	
	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI
Total	37.4	[35.9–38.9]	66.9	[65.3–68.5]	57.1	[54.5–59.7]	78.2	[76.1–80.4]
Sex								
Male	37.8	[35.7–39.8]	65.8	[63.6–68.0]	57.7	[53.8–61.6]	76.4	[73.2–79.5]
Female	37.0	[35.0–39.1]	67.8	[65.7–69.9]	56.5	[53.2–59.9]	79.8	[77.0–82.6]
Race/ethnicity ¹								
White	28.3	[26.6–30.0]	60.6	[58.6–62.6]	46.5	[43.4–49.6]	72.4	[69.3–75.4]
Black	64.3	[60.1–68.4]	86.1	[83.5–88.8]	74.2	[67.4–81.0]	86.7	[81.8–91.6]
Hispanic	61.9	[57.4–66.5]	84.1	[80.7–87.6]	78.0	[72.8–83.2]	91.4	[88.3–94.5]
Asian	48.9	[43.7–54.2]	69.1	[64.2–73.9]	55.0	[43.3–66.6]	73.1	[62.6–83.6]
American Indian	42.1	[27.6–56.6]	70.0	[50.3–89.7]	‡	[†]	‡	[†]
Two or more races	43.4	[36.1–50.8]	73.6	[66.9–80.3]	57.4	[44.8–70.0]	78.0	[68.3–87.7]
First language learned to speak as a child								
Non-English	58.8	[54.7–63.0]	80.0	[76.4–83.6]	81.0	[76.7–85.4]	90.7	[87.2–94.2]
English	35.0	[33.5–36.6]	65.5	[63.8–67.2]	52.2	[49.4–55.0]	75.7	[73.3–78.2]
Highest level of parents' education								
High school or less	56.2	[52.6–59.8]	83.9	[81.3–86.6]	67.4	[62.7–72.1]	84.7	[81.0–88.4]
Some college	44.1	[41.5–46.6]	76.5	[74.3–78.7]	56.2	[52.4–60.1]	81.2	[78.2–84.3]
College graduation	30.9	[28.3–33.5]	62.8	[60.0–65.6]	47.2	[40.9–53.4]	66.0	[59.6–72.4]
Graduate/professional degree	23.5	[21.0–26.1]	47.5	[44.4–50.5]	46.1	[37.2–55.1]	65.8	[57.6–74.1]
Family income in 2001								
\$35,000 or lower	61.6	[58.4–64.7]	87.8	[85.8–89.8]	73.8	[70.1–77.4]	88.4	[85.5–91.4]
\$35,001–75,000	39.4	[37.1–41.7]	75.5	[73.4–77.5]	53.3	[49.5–57.2]	78.9	[75.3–82.5]
More than \$75,000	20.2	[18.1–22.2]	44.4	[42.0–46.9]	33.5	[28.0–39.1]	57.5	[52.0–63.0]
Family composition								
Mother and father	32.8	[31.0–34.6]	61.3	[59.3–63.4]	55.6	[52.0–59.2]	76.9	[74.0–79.9]
Mother or father and guardian	41.3	[36.9–45.7]	74.8	[71.1–78.5]	54.1	[47.6–60.6]	76.8	[72.0–81.6]
Single parent (mother or father)	49.0	[45.2–52.7]	79.2	[76.3–82.0]	61.8	[56.1–67.4]	80.6	[75.5–85.7]
Other	55.6	[46.3–64.9]	86.2	[80.4–92.1]	64.4	[53.9–75.0]	88.6	[81.9–95.2]
Highest mathematics course level								
Pre-algebra or below	62.1	[50.6–73.7]	83.7	[75.3–92.1]	67.6	[59.0–76.3]	82.0	[74.7–89.3]
Algebra I/geometry	51.8	[47.0–56.5]	76.9	[72.6–81.2]	60.2	[55.2–65.3]	79.5	[75.6–83.3]
Algebra II	44.8	[41.2–48.4]	73.7	[70.7–76.8]	54.7	[50.3–59.2]	78.9	[74.7–83.0]
Trigonometry/analytic geometry/statistics	36.0	[32.9–39.1]	67.5	[64.0–71.0]	59.6	[52.6–66.5]	79.2	[73.4–85.0]
Pre-calculus/calculus	30.1	[28.0–32.3]	61.0	[58.7–63.4]	45.0	[36.6–53.4]	71.9	[64.2–79.6]

See notes at end of table.

National Center for Education Statistics

Table 2. Among high school seniors from the 2002 sophomore cohort who planned to attend 2- or 4-year postsecondary institutions after high school, percentage whose parents reported in 2002 that college expenses and the availability of financial aid were very important in choosing an institution, by selected student, family, and high school characteristics: 2004
—Continued

Selected student, family, and high school characteristics	Students who planned to attend 4-year institutions				Students who planned to attend 2-year institutions			
	Low college expenses are very important		Availability of financial aid is very important		Low college expenses are very important		Availability of financial aid is very important	
	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI
Highest science course level								
Low-level science	46.3	[29.7–63.0]	79.8	[68.8–90.7]	54.2	[42.2–66.1]	68.9	[56.4–81.4]
Secondary physical science/basic biology	47.6	[34.5–60.7]	78.3	[67.4–89.1]	62.3	[49.4–75.2]	80.8	[71.5–90.2]
General biology	50.8	[46.5–55.0]	74.4	[70.8–78.1]	58.2	[53.6–62.8]	80.4	[76.8–84.0]
Chemistry I or physics I	39.8	[37.2–42.5]	69.0	[66.5–71.5]	58.3	[54.0–62.6]	79.6	[75.8–83.4]
Chemistry I and physics I	31.8	[28.6–34.9]	63.1	[59.8–66.4]	50.0	[40.8–59.1]	74.8	[66.8–82.9]
Chemistry II, physics II, or advanced biology	28.7	[25.8–31.6]	62.0	[58.7–65.2]	55.7	[47.3–64.0]	73.9	[67.5–80.3]
High-level academic coursework								
Did not complete	42.2	[40.0–44.4]	70.1	[68.1–72.1]	58.2	[55.5–60.9]	79.0	[76.6–81.4]
Completed	30.2	[27.9–32.5]	62.7	[60.1–65.4]	48.8	[39.6–58.0]	74.3	[66.2–82.4]
Mathematics achievement test in senior year								
Lowest quarter	59.8	[55.5–64.2]	83.0	[79.6–86.4]	65.9	[61.8–70.1]	80.8	[77.4–84.2]
Middle two quarters	41.0	[38.9–43.0]	70.0	[67.9–72.2]	53.7	[50.3–57.1]	78.1	[75.1–81.1]
Highest quarter	25.9	[23.7–28.0]	57.9	[55.3–60.5]	43.3	[34.1–52.4]	70.0	[61.1–78.8]
High school GPA								
2.0 or lower	58.1	[51.9–64.4]	80.5	[75.3–85.6]	63.0	[57.1–68.9]	79.2	[74.0–84.4]
2.1–3.0	42.6	[39.9–45.2]	69.4	[66.9–71.9]	56.1	[52.4–59.8]	77.9	[74.8–81.0]
Higher than 3.0	31.8	[29.8–33.7]	64.2	[62.1–66.3]	55.3	[50.5–60.1]	79.8	[75.1–84.4]
Parent's 2002 educational expectations for students								
High school or less	‡	[†]	‡	[†]	‡	[†]	‡	[†]
Some college	50.6	[41.3–59.8]	78.4	[71.2–85.6]	55.4	[48.5–62.4]	71.8	[65.7–77.8]
College graduation	39.0	[36.7–41.3]	66.6	[64.3–68.8]	55.8	[52.1–59.5]	77.3	[74.1–80.5]
Graduate/professional degree	35.2	[33.2–37.2]	66.5	[64.4–68.7]	59.8	[55.2–64.4]	82.6	[79.1–86.1]
Sector of high school last attended								
Public	39.6	[37.9–41.3]	69.4	[67.7–71.1]	57.6	[55.0–60.3]	78.8	[76.6–81.0]
Catholic	22.2	[18.9–25.6]	52.3	[48.0–56.6]	49.0	[38.0–60.1]	68.9	[60.1–77.7]
Other private	17.5	[13.6–21.3]	41.6	[35.3–47.9]	32.3	[21.1–43.5]	58.3	[46.9–69.8]
Urbanicity of high school last attended								
Urban	43.8	[41.1–46.5]	68.1	[65.2–71.0]	63.0	[58.5–67.5]	81.5	[77.2–85.9]
Suburban	33.8	[31.6–35.9]	65.1	[62.7–67.4]	54.5	[50.7–58.4]	77.0	[74.1–79.9]
Rural	36.0	[33.0–39.0]	69.6	[66.2–73.1]	55.0	[49.3–60.8]	76.8	[72.1–81.6]

† Not applicable.

‡ Reporting standards not met. (Too few cases for a reliable estimate.)

¹ Black includes African American, Hispanic includes Latino, Asian includes Native Hawaiian or other Pacific Islander, and American Indian includes Alaska Native. All race categories exclude individuals of Hispanic or Latino origin.

NOTE: See the Technical Notes for the definition of 95% CI (confidence interval). This table shows, for example, that among 2004 high school seniors from the 2002 sophomore cohort who planned to attend a 4-year postsecondary institution after high school, 37.4 percent had parents rating low college expenses as very important in choosing an institution to attend. Estimates in this table are based on all spring 2004 high school seniors from the 2002 sophomore cohort who planned to attend a 2- or 4-year postsecondary institution after high school.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Education Longitudinal Study of 2002 (ELS:02), "Base year, 2002" and "First Follow-up, 2004."

National Center for Education Statistics

Table 3. Among high school seniors from the 2002 sophomore cohort who planned to attend 4-year postsecondary institutions after high school, percentage whose parents reported in 2002 that they had made various financial preparations for their children's future education, by selected student, family, and high school characteristics: 2004

Selected student, family, and high school characteristics	Started a savings account		Made investments in stocks/real estate		Planned to reduce expenses		Bought U.S. savings bonds		Set up a college investment fund		Bought an insurance policy	
	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI
Total	44.9	[43.2–46.7]	34.7	[32.9–36.5]	32.1	[30.7–33.6]	23.7	[22.4–25.0]	23.4	[21.9–24.9]	21.2	[20.0–22.5]
Sex												
Male	46.3	[44.1–48.5]	36.1	[33.6–38.5]	33.4	[31.2–35.5]	23.8	[22.0–25.6]	25.0	[22.9–27.1]	21.9	[20.0–23.8]
Female	43.8	[41.5–46.0]	33.5	[31.3–35.8]	31.1	[29.2–33.0]	23.6	[21.7–25.4]	22.0	[20.1–23.8]	20.7	[19.1–22.3]
Race/ethnicity ¹												
White	47.4	[45.2–49.7]	39.3	[37.0–41.6]	31.8	[30.0–33.6]	27.1	[25.4–28.9]	26.9	[25.0–28.9]	21.0	[19.5–22.4]
Black	43.9	[39.7–48.1]	23.6	[19.9–27.4]	35.9	[31.7–40.2]	17.1	[14.1–20.1]	15.0	[11.9–18.1]	26.0	[22.7–29.3]
Hispanic	29.8	[25.7–33.9]	20.9	[17.1–24.6]	26.4	[22.1–30.8]	9.9	[7.0–12.7]	10.9	[8.0–13.9]	15.7	[12.6–18.9]
Asian	45.9	[39.0–52.7]	30.8	[25.2–36.4]	39.5	[33.9–45.0]	19.7	[15.2–24.3]	21.4	[17.0–25.8]	20.8	[16.7–24.9]
American Indian	46.1	[30.6–61.5]	15.7	[4.1–27.4]	34.8	[20.0–49.7]	18.6	[4.7–32.5]	12.8	[0.0–26.0]	31.9	[13.2–50.5]
Two or more races	40.9	[33.3–48.6]	29.3	[22.8–35.8]	33.8	[26.2–41.4]	22.9	[16.3–29.5]	21.6	[15.0–28.1]	24.0	[17.0–31.1]
First language learned to speak as a child												
Non-English	31.2	[26.7–35.7]	17.3	[14.3–20.3]	29.0	[25.1–33.0]	10.3	[7.5–13.0]	9.8	[7.3–12.3]	13.0	[10.2–15.8]
English	46.4	[44.6–48.3]	36.6	[34.7–38.5]	32.5	[30.9–34.1]	25.2	[23.7–26.6]	24.9	[23.3–26.5]	22.1	[20.8–23.5]
Highest level of parents' education												
High school or less	26.4	[23.3–29.5]	13.9	[11.3–16.4]	20.1	[17.1–23.1]	9.4	[7.1–11.6]	6.9	[4.9–9.0]	12.7	[10.1–15.3]
Some college	37.4	[34.7–40.1]	27.1	[24.5–29.7]	29.8	[27.2–32.4]	20.5	[18.3–22.7]	16.3	[14.1–18.5]	19.7	[17.4–21.9]
College graduation	52.3	[49.4–55.3]	41.9	[39.2–44.6]	38.1	[35.5–40.8]	29.2	[26.8–31.5]	27.6	[25.0–30.1]	24.0	[21.5–26.5]
Graduate/professional degree	58.5	[55.3–61.6]	50.2	[46.9–53.6]	36.3	[33.2–39.3]	31.0	[27.9–34.2]	38.7	[35.7–41.8]	25.8	[23.0–28.5]
Family income in 2001												
\$35,000 or lower	25.7	[23.0–28.4]	10.7	[8.8–12.5]	22.4	[19.8–25.0]	8.7	[7.0–10.3]	7.2	[5.5–8.8]	12.7	[10.6–14.8]
\$35,001–75,000	42.2	[39.8–44.6]	29.0	[26.7–31.3]	33.2	[30.9–35.4]	22.7	[20.8–24.7]	18.7	[16.9–20.6]	20.3	[18.4–22.2]
More than \$75,000	59.8	[57.5–62.1]	55.8	[53.2–58.4]	37.1	[34.7–39.4]	34.1	[32.0–36.1]	38.4	[35.9–40.9]	27.6	[25.6–29.6]

See notes at end of table.

National Center for Education Statistics

Table 3. Among high school seniors from the 2002 sophomore cohort who planned to attend 4-year postsecondary institutions after high school, percentage whose parents reported in 2002 that they had made various financial preparations for their children's future education, by selected student, family, and high school characteristics: 2004—Continued

Selected student, family, and high school characteristics	Started a savings account		Made investments in stocks/real estate		Planned to reduce expenses		Bought U.S. savings bonds		Set up a college investment fund		Bought an insurance policy	
	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI
Family composition												
Mother and father	48.6	[46.5–50.7]	39.7	[37.7–41.8]	33.7	[31.9–35.6]	26.7	[25.1–28.3]	27.1	[25.3–29.0]	22.1	[20.7–23.6]
Mother or father and guardian	41.6	[37.4–45.9]	27.2	[22.9–31.4]	34.4	[30.1–38.7]	17.5	[13.8–21.2]	14.0	[11.0–16.9]	20.5	[17.1–24.0]
Single parent (mother or father)	36.0	[32.7–39.3]	23.9	[20.8–26.9]	27.1	[24.0–30.2]	18.2	[15.5–21.0]	17.8	[15.1–20.4]	19.6	[16.7–22.4]
Other	26.5	[18.0–34.9]	15.2	[7.8–22.7]	12.6	[6.5–18.8]	11.9	[5.7–18.1]	11.3	[4.9–17.8]	12.1	[6.2–18.0]
Highest mathematics course level												
Pre-algebra or below	29.7	[19.0–40.5]	19.8	[10.4–29.3]	25.5	[15.1–35.8]	12.8	[4.5–21.0]	7.4	[2.1–12.7]	18.9	[10.3–27.6]
Algebra I/geometry	30.6	[26.0–35.2]	20.4	[16.6–24.3]	22.6	[18.5–26.7]	14.1	[10.7–17.4]	11.7	[8.1–15.2]	17.2	[13.5–20.9]
Algebra II	39.2	[36.0–42.5]	28.8	[25.8–31.8]	31.4	[28.3–34.5]	23.0	[20.1–25.9]	18.1	[15.2–20.9]	18.7	[16.0–21.3]
Trigonometry/analytic geometry/statistics	46.3	[42.9–49.7]	33.6	[30.2–36.9]	32.4	[29.1–35.6]	23.8	[20.6–27.0]	24.2	[21.3–27.0]	22.9	[20.0–25.8]
Pre-calculus/calculus	49.9	[47.6–52.3]	41.7	[39.2–44.1]	34.6	[32.4–36.7]	26.7	[24.8–28.7]	28.3	[26.2–30.4]	21.8	[20.1–23.6]
Highest science course level												
Low-level science	29.6	[16.5–42.8]	19.3	[8.2–30.5]	22.6	[10.2–35.1]	18.3	[7.2–29.4]	3.7	[0.0–8.0]	8.9	[2.1–15.8]
Secondary physical science/basic biology	31.0	[17.3–44.7]	11.8	[2.4–21.3]	26.0	[11.9–40.1]	10.2	[2.3–18.1]	12.5	[2.1–22.9]	20.2	[10.2–30.1]
General biology	34.5	[30.5–38.5]	24.4	[20.9–28.0]	27.2	[23.9–30.5]	16.5	[13.6–19.5]	13.7	[11.0–16.5]	17.5	[14.8–20.3]
Chemistry I or physics I	43.6	[40.9–46.2]	34.1	[31.4–36.8]	31.8	[29.1–34.5]	22.6	[20.3–24.8]	22.2	[19.7–24.6]	20.9	[18.7–23.1]
Chemistry I and physics I	47.0	[43.5–50.4]	38.0	[34.7–41.4]	32.5	[29.5–35.5]	27.7	[24.7–30.7]	26.8	[23.8–29.8]	21.1	[18.7–23.5]
Chemistry II, physics II, or advanced biology	52.3	[49.0–55.5]	41.5	[38.0–45.0]	36.5	[33.6–39.5]	27.8	[25.0–30.7]	29.3	[26.0–32.6]	23.3	[20.8–25.7]
High-level academic coursework												
Did not complete	40.8	[38.5–43.1]	30.5	[28.4–32.7]	30.4	[28.5–32.4]	21.9	[20.1–23.6]	19.3	[17.4–21.2]	20.0	[18.4–21.6]
Completed	50.0	[47.5–52.5]	40.8	[38.3–43.3]	34.6	[32.4–36.7]	26.7	[24.5–28.8]	28.8	[26.6–31.0]	22.0	[20.1–23.9]
Mathematics achievement test in senior year												
Lowest quarter	32.1	[28.1–36.1]	16.7	[13.5–19.9]	27.1	[23.1–31.1]	14.8	[12.0–17.6]	10.2	[7.6–12.9]	17.7	[14.4–21.0]
Middle two quarters	42.8	[40.6–45.0]	31.6	[29.6–33.5]	31.2	[29.3–33.2]	22.2	[20.4–24.0]	21.0	[19.2–22.8]	21.1	[19.3–22.9]
Highest quarter	51.5	[48.8–54.2]	44.0	[41.3–46.8]	34.8	[32.4–37.2]	28.2	[26.1–30.4]	30.3	[27.9–32.7]	22.4	[20.3–24.6]

See notes at end of table.

National Center for Education Statistics

Table 3. Among high school seniors from the 2002 sophomore cohort who planned to attend 4-year postsecondary institutions after high school, percentage whose parents reported in 2002 that they had made various financial preparations for their children's future education, by selected student, family, and high school characteristics: 2004—Continued

Selected student, family, and high school characteristics	Started a savings account		Made investments in stocks/real estate		Planned to reduce expenses		Bought U.S. savings bonds		Set up a college investment fund		Bought an insurance policy	
	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI
High school GPA												
2.0 or lower	31.8	[25.4–38.2]	20.5	[15.2–25.9]	29.0	[23.3–34.6]	10.9	[7.2–14.5]	11.7	[7.6–15.7]	19.9	[14.8–25.0]
2.1–3.0	40.3	[37.7–42.8]	30.1	[27.6–32.7]	30.0	[27.7–32.2]	21.3	[19.1–23.5]	19.3	[17.1–21.5]	20.3	[18.2–22.3]
Higher than 3.0	48.6	[46.4–50.8]	39.1	[36.7–41.5]	33.8	[31.9–35.8]	26.7	[24.9–28.5]	26.9	[24.9–28.8]	21.3	[19.7–22.9]
Parent's 2002 educational expectations for students												
High school or less	42.0	[20.5–63.5]	23.9	[5.8–42.0]	29.1	[8.2–50.1]	17.9	[0.9–34.8]	12.8	[0.0–25.8]	17.0	[2.0–32.1]
Some college	18.0	[10.8–25.2]	15.9	[8.8–22.9]	15.8	[8.7–22.9]	4.6	[1.4–7.9]	2.4	[0.0–5.0]	10.7	[5.1–16.2]
College graduation	40.5	[38.1–42.9]	30.6	[28.3–32.8]	27.1	[25.0–29.1]	21.7	[19.8–23.7]	21.1	[19.1–23.2]	18.1	[16.3–19.9]
Graduate/professional degree	50.0	[47.9–52.2]	39.2	[36.9–41.5]	37.3	[35.3–39.2]	26.3	[24.4–28.1]	26.3	[24.4–28.3]	24.4	[22.8–26.1]
Sector of high school last attended												
Public	43.9	[42.0–45.8]	32.8	[30.9–34.7]	31.8	[30.2–33.4]	23.3	[21.8–24.7]	22.0	[20.3–23.6]	21.0	[19.6–22.4]
Catholic	53.2	[49.8–56.5]	47.1	[42.6–51.5]	36.8	[34.1–39.6]	30.4	[26.8–33.9]	34.7	[31.8–37.7]	24.0	[21.1–26.9]
Other private	53.0	[48.0–58.1]	53.3	[46.8–59.9]	31.7	[27.1–36.3]	22.9	[18.8–27.0]	34.5	[28.9–40.1]	21.1	[17.8–24.3]
Urbanicity of high school last attended												
Urban	43.9	[41.1–46.7]	32.3	[29.5–35.1]	32.4	[29.7–35.1]	21.2	[19.1–23.3]	23.7	[21.5–25.9]	23.6	[21.4–25.9]
Suburban	46.8	[44.3–49.4]	37.0	[34.4–39.7]	32.8	[30.8–34.8]	25.3	[23.4–27.2]	24.9	[22.6–27.1]	20.6	[18.9–22.3]
Rural	41.8	[37.7–46.0]	32.8	[28.4–37.2]	30.0	[26.3–33.8]	23.8	[20.3–27.4]	19.2	[15.5–22.9]	18.8	[16.0–21.6]

¹ Black includes African American, Hispanic includes Latino, Asian includes Native Hawaiian or other Pacific Islander, and American Indian includes Alaska Native. All race categories exclude individuals of Hispanic or Latino origin.

NOTE: See the Technical Notes for the definition of 95% CI (confidence interval). This table shows, for example, that among high school seniors from the 2002 sophomore cohort who planned to attend a 4-year postsecondary institution after high school, 44.9 percent had parents who reported in 2002 that they had started a savings account to help pay for their children's future education. Parents could choose more than one type of financial preparation. Estimates in this table are based on parents of all spring 2004 high school seniors from the 2002 sophomore cohort who planned to attend a 4-year postsecondary institution after high school.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Education Longitudinal Study of 2002 (ELS:02), "Base year, 2002" and "First Follow-up, 2004."

National Center for Education Statistics

Table 4. Among high school seniors from the 2002 sophomore cohort who planned to attend 2-year postsecondary institutions after high school, percentage whose parents reported in 2002 that they had made various financial preparations for their children's future education, by selected student, family, and high school characteristics: 2004

Selected student, family, and high school characteristics	Started a savings account		Planned to reduce expenses		Made investments in stocks/real estate		Bought U.S. savings bonds		Bought an insurance policy		Set up a college investment fund	
	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI
Total	33.1	[30.5–35.7]	24.0	[21.8–26.1]	21.2	[18.6–23.7]	17.2	[14.7–19.7]	16.2	[14.3–18.1]	11.8	[9.8–13.8]
Sex												
Male	34.5	[30.4–38.6]	24.2	[20.9–27.5]	24.7	[20.4–28.9]	18.7	[15.2–22.1]	17.1	[14.0–20.2]	13.0	[10.1–15.9]
Female	31.9	[28.5–35.4]	23.8	[20.6–26.9]	18.4	[15.7–21.0]	16.0	[12.7–19.4]	15.5	[13.1–18.0]	10.9	[8.5–13.4]
Race/ethnicity ¹												
White	35.1	[31.7–38.4]	24.9	[22.1–27.8]	25.8	[22.4–29.2]	21.1	[17.8–24.4]	16.6	[13.9–19.3]	14.5	[11.8–17.2]
Black	37.0	[28.7–45.3]	29.2	[21.9–36.6]	16.2	[10.0–22.5]	16.4	[10.1–22.8]	23.8	[16.4–31.1]	10.8	[6.0–15.5]
Hispanic	26.3	[21.3–31.2]	18.1	[14.2–22.0]	11.9	[7.8–15.9]	8.0	[4.1–11.8]	12.0	[8.2–15.7]	5.9	[3.4–8.5]
Asian	37.6	[27.2–48.0]	36.5	[27.5–45.5]	20.8	[12.5–29.0]	13.7	[5.8–21.5]	22.9	[13.4–32.5]	11.4	[5.2–17.7]
American Indian	‡	[†]	‡	[†]	‡	[†]	‡	[†]	‡	[†]	‡	[†]
Two or more races	31.8	[18.5–45.1]	25.0	[14.8–35.2]	17.3	[6.4–28.1]	18.0	[7.4–28.6]	12.4	[2.2–22.6]	10.3	[2.1–18.4]
First language learned to speak as a child												
Non-English	23.7	[18.7–28.8]	18.3	[14.0–22.7]	11.8	[7.8–15.8]	6.1	[3.1–9.0]	11.6	[7.5–15.7]	5.7	[3.0–8.4]
English	35.0	[32.1–37.9]	25.1	[22.7–27.5]	23.1	[20.2–26.0]	19.5	[16.6–22.4]	17.2	[14.9–19.5]	13.1	[10.8–15.4]
Highest level of parents' education												
High school or less	22.5	[18.4–26.7]	16.4	[12.5–20.3]	11.7	[8.3–15.0]	9.7	[6.5–12.8]	12.5	[9.1–15.9]	3.0	[1.3–4.8]
Some college	34.6	[31.1–38.0]	25.1	[21.8–28.4]	20.3	[16.8–23.8]	18.0	[14.4–21.7]	17.7	[14.6–20.8]	12.7	[10.0–15.5]
College graduation	37.9	[31.1–44.6]	30.4	[25.0–35.7]	32.2	[24.9–39.4]	24.4	[18.0–30.9]	15.4	[11.2–19.6]	20.7	[14.8–26.6]
Graduate/professional degree	48.8	[39.7–57.9]	30.3	[22.3–38.4]	34.4	[26.6–42.2]	23.3	[16.3–30.2]	22.0	[14.7–29.3]	18.6	[11.6–25.6]
Family income in 2001												
\$35,000 or lower	23.0	[19.6–26.4]	18.9	[15.7–22.2]	7.9	[5.6–10.2]	7.3	[5.2–9.4]	10.7	[8.1–13.3]	5.2	[3.1–7.3]
\$35,001–75,000	33.2	[29.6–36.8]	25.9	[22.4–29.5]	20.3	[16.9–23.7]	18.5	[14.6–22.4]	16.4	[13.6–19.2]	9.5	[7.0–11.9]
More than \$75,000	51.3	[44.3–58.3]	28.9	[23.6–34.3]	47.8	[42.1–53.4]	32.9	[26.4–39.5]	26.1	[20.9–31.4]	29.3	[22.9–35.6]

See notes at end of table.

National Center for Education Statistics

Table 4. Among high school seniors from the 2002 sophomore cohort who planned to attend 2-year postsecondary institutions after high school, percentage whose parents reported in 2002 that they had made various financial preparations for their children's future education, by selected student, family, and high school characteristics: 2004—Continued

Selected student, family, and high school characteristics	Started a savings account		Planned to reduce expenses		Made investments in stocks/real estate		Bought U.S. savings bonds		Bought an insurance policy		Set up a college investment fund	
	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI
Family composition												
Mother and father	36.6	[33.3–40.0]	25.8	[22.7–28.9]	24.8	[21.6–28.0]	20.5	[17.2–23.7]	18.7	[15.9–21.5]	13.4	[10.8–15.9]
Mother or father and guardian	31.1	[25.3–37.0]	20.9	[15.8–26.0]	15.5	[10.0–21.1]	14.3	[9.0–19.6]	11.1	[7.2–15.1]	10.4	[6.4–14.3]
Single parent (mother or father)	25.3	[20.4–30.2]	23.6	[18.7–28.5]	15.7	[11.3–20.1]	11.1	[7.1–15.0]	14.1	[10.1–18.0]	9.9	[5.4–14.5]
Other	32.8	[19.0–46.6]	14.0	[4.8–23.1]	23.6	[12.9–34.3]	16.4	[6.0–26.8]	14.9	[3.7–26.0]	7.3	[0.0–14.6]
Highest mathematics course level												
Pre-algebra or below	31.3	[22.2–40.4]	21.1	[13.3–28.9]	17.8	[10.5–25.1]	15.6	[7.6–23.6]	13.7	[6.3–21.1]	8.7	[2.5–14.9]
Algebra I/geometry	32.2	[27.3–37.1]	24.4	[20.2–28.5]	21.7	[17.3–26.0]	13.8	[9.5–18.1]	15.6	[12.2–19.1]	10.3	[7.0–13.5]
Algebra II	30.6	[26.0–35.3]	22.4	[18.5–26.3]	19.7	[15.6–23.8]	18.2	[14.3–22.2]	15.5	[12.3–18.7]	8.9	[6.2–11.6]
Trigonometry/analytic geometry/statistics	35.2	[28.4–42.0]	27.1	[21.1–33.1]	23.7	[17.8–29.7]	21.2	[15.2–27.2]	15.9	[11.1–20.7]	14.6	[9.2–20.1]
Pre-calculus/calculus	43.5	[35.6–51.4]	27.8	[21.2–34.4]	23.9	[16.2–31.7]	20.7	[13.7–27.8]	24.8	[17.7–32.0]	22.8	[15.1–30.6]
Highest science course level												
Low-level science	43.1	[26.7–59.4]	30.9	[19.9–42.0]	27.3	[16.5–38.2]	30.6	[16.3–44.8]	14.5	[4.0–25.0]	8.5	[1.6–15.4]
Secondary physical science/ basic biology	28.4	[18.3–38.4]	24.1	[10.1–38.0]	23.3	[11.5–35.2]	17.9	[4.4–31.4]	18.5	[7.8–29.3]	11.4	[1.8–21.0]
General biology	30.6	[26.3–34.8]	20.4	[17.0–23.8]	18.6	[14.9–22.3]	14.5	[11.3–17.7]	14.9	[11.5–18.3]	10.3	[7.8–12.9]
Chemistry I or physics I	34.1	[29.5–38.8]	26.6	[22.7–30.6]	22.2	[17.9–26.5]	18.2	[14.4–22.0]	18.5	[14.5–22.5]	13.1	[9.2–17.1]
Chemistry I and physics I	41.8	[32.0–51.7]	26.3	[18.6–34.1]	27.0	[19.4–34.6]	16.9	[8.9–24.9]	17.0	[9.4–24.6]	16.2	[9.3–23.2]
Chemistry II, physics II, or advanced biology	32.1	[24.1–40.1]	27.3	[19.4–35.2]	19.5	[12.6–26.4]	17.0	[9.8–24.3]	15.6	[9.6–21.6]	10.8	[5.6–16.0]
High-level academic coursework												
Did not complete	33.0	[30.2–35.8]	23.9	[21.5–26.4]	21.2	[18.5–23.8]	16.8	[14.2–19.3]	16.8	[14.6–18.9]	11.5	[9.4–13.6]
Completed	37.0	[28.3–45.6]	27.8	[20.5–35.0]	23.0	[15.2–30.9]	21.1	[13.6–28.7]	14.4	[8.0–20.8]	14.6	[7.8–21.4]
Mathematics achievement test in senior year												
Lowest quarter	31.1	[26.9–35.3]	23.2	[19.5–26.9]	19.1	[15.2–23.1]	14.1	[10.6–17.5]	16.0	[12.8–19.1]	9.4	[6.6–12.2]
Middle two quarters	32.8	[29.6–36.1]	23.7	[20.8–26.5]	22.4	[19.2–25.6]	18.6	[15.5–21.7]	16.3	[13.7–18.8]	13.2	[10.4–16.0]
Highest quarter	41.0	[31.9–50.2]	28.2	[21.1–35.2]	21.6	[13.7–29.6]	20.6	[13.1–28.2]	16.8	[9.6–23.9]	12.7	[6.2–19.3]

See notes at end of table.

National Center for Education Statistics

Table 4. Among high school seniors from the 2002 sophomore cohort who planned to attend 2-year postsecondary institutions after high school, percentage whose parents reported in 2002 that they had made various financial preparations for their children's future education, by selected student, family, and high school characteristics: 2004—Continued

Selected student, family, and high school characteristics	Started a savings account		Planned to reduce expenses		Made investments in stocks/real estate		Bought U.S. savings bonds		Bought an insurance policy		Set up a college investment fund	
	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI
High school GPA												
2.0 or lower	31.1	[25.2–36.9]	25.1	[19.0–31.2]	20.9	[15.5–26.3]	14.6	[9.6–19.7]	14.4	[10.3–18.5]	11.9	[8.0–15.8]
2.1–3.0	33.0	[29.4–36.6]	24.4	[21.3–27.6]	21.2	[17.7–24.7]	17.5	[14.4–20.7]	17.4	[14.7–20.0]	10.2	[7.9–12.6]
Higher than 3.0	36.1	[30.7–41.5]	23.5	[19.0–27.9]	22.1	[17.0–27.2]	18.4	[13.2–23.6]	16.3	[11.9–20.7]	15.5	[10.1–20.8]
Parent's 2002 educational expectations for students												
High school or less	‡	[†]	‡	[†]	‡	[†]	‡	[†]	‡	[†]	‡	[†]
Some college	26.8	[20.1–33.6]	22.2	[16.3–28.2]	15.0	[9.6–20.4]	13.9	[8.9–18.8]	14.2	[9.0–19.5]	8.0	[4.0–12.0]
College graduation	33.9	[30.4–37.5]	24.1	[21.3–26.9]	23.4	[19.9–27.0]	18.4	[15.1–21.8]	16.9	[13.9–19.8]	13.2	[10.5–15.8]
Graduate/professional degree	34.6	[30.4–38.8]	24.9	[21.1–28.7]	20.2	[16.3–24.1]	16.8	[13.0–20.6]	16.3	[13.2–19.5]	11.4	[8.3–14.4]
Sector of high school last attended												
Public	32.8	[30.2–35.5]	23.8	[21.5–26.0]	20.6	[17.9–23.2]	17.1	[14.5–19.6]	16.2	[14.2–18.2]	11.6	[9.6–13.7]
Catholic	41.6	[32.2–51.0]	32.5	[23.1–41.8]	37.8	[28.8–46.7]	23.4	[16.6–30.3]	16.7	[11.2–22.1]	18.7	[10.5–26.9]
Other private	37.0	[24.6–49.4]	24.4	[12.9–35.9]	34.1	[21.3–46.8]	14.4	[5.6–23.1]	16.6	[7.1–26.1]	15.5	[5.3–25.7]
Urbanicity of high school last attended												
Urban	31.8	[27.2–36.5]	23.9	[19.8–28.0]	18.7	[14.7–22.7]	12.9	[8.9–16.9]	15.3	[11.7–18.9]	11.9	[7.8–16.0]
Suburban	34.2	[30.5–37.9]	24.1	[20.8–27.4]	23.8	[20.0–27.6]	19.8	[15.9–23.7]	16.2	[13.7–18.7]	12.2	[9.3–15.0]
Rural	32.3	[27.1–37.4]	23.7	[19.8–27.6]	18.1	[12.9–23.3]	16.4	[12.0–20.8]	17.5	[12.9–22.2]	11.0	[7.3–14.6]

† Not applicable.

‡ Reporting standards not met. (Too few cases for a reliable estimate.)

¹ Black includes African American, Hispanic includes Latino, Asian includes Native Hawaiian or other Pacific Islander, and American Indian includes Alaska Native. All race categories exclude individuals of Hispanic or Latino origin.

NOTE: See the Technical Notes for the definition of 95% CI (confidence interval). This table shows, for example, that among high school seniors from the 2002 sophomore cohort who planned to attend a 2-year postsecondary institution after high school, 33.1 percent had parents who reported in 2002 that they had started a savings account to help pay for their children's future education. Parents could choose more than one type of financial preparation. Estimates in this table are based on parents of all spring 2004 high school seniors from the 2002 sophomore cohort who planned to attend a 2-year postsecondary institution after high school.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Education Longitudinal Study of 2002 (ELS:02), "Base year, 2002" and "First Follow-up, 2004."

National Center for Education Statistics

Table 5. Among 2004 high school seniors who had applied to college by 2006, percentage who applied for financial aid, and among those who did not apply, percentage who reported various reasons for not doing so, by selected student, family, and high school characteristics: 2006

Selected student, family, and high school characteristics	Reasons for not applying for financial aid															
	Students who applied for financial aid		I or my family were able to pay for education without financial aid		I or my family thought that I would not qualify for aid		Other reason		I was offered aid without applying		The aid application process was too difficult		I or my family could not afford to pay back a loan		I or my family did not want to report financial information	
	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI
Total	72.8	[71.6–74.0]	55.3	[52.9–57.7]	40.5	[38.0–43.0]	24.4	[22.3–26.4]	11.5	[9.9–13.1]	10.3	[8.8–11.8]	9.0	[7.6–10.3]	4.8	[3.8–5.8]
Sex																
Male	68.6	[66.9–70.3]	57.4	[54.0–60.7]	36.6	[33.4–39.7]	25.4	[22.7–28.1]	12.6	[10.5–14.7]	10.7	[8.7–12.7]	8.2	[6.5–9.9]	4.4	[3.1–5.7]
Female	76.5	[74.9–78.0]	52.9	[49.6–56.2]	45.1	[41.7–48.5]	23.1	[20.0–26.2]	10.1	[7.9–12.3]	9.9	[7.8–11.9]	9.9	[7.9–11.9]	5.3	[3.8–6.9]
Race/ethnicity ¹																
White	71.9	[70.3–73.4]	62.7	[59.8–65.7]	42.1	[38.9–45.2]	20.6	[18.1–23.0]	10.4	[8.7–12.1]	9.1	[7.3–10.8]	5.6	[4.2–7.0]	4.1	[2.9–5.3]
Black	80.6	[77.8–83.3]	37.3	[30.0–44.6]	31.0	[24.2–37.9]	34.0	[25.6–42.3]	17.2	[11.5–22.8]	10.5	[5.5–15.4]	17.5	[11.3–23.8]	4.9	[1.7–8.1]
Hispanic	69.8	[66.3–73.2]	35.8	[30.3–41.2]	39.8	[33.3–46.2]	34.2	[28.3–40.0]	11.8	[8.0–15.6]	14.0	[9.5–18.5]	18.7	[14.5–22.8]	7.1	[4.0–10.1]
Asian	75.0	[71.7–78.3]	59.2	[52.0–66.4]	49.3	[42.3–56.3]	22.1	[16.6–27.7]	12.5	[7.4–17.5]	14.6	[10.1–19.1]	5.6	[2.8–8.4]	9.0	[5.1–12.8]
American Indian	65.4	[53.0–77.8]	‡	[†]	‡	[†]	‡	[†]	‡	[†]	‡	[†]	‡	[†]	‡	[†]
Two or more races	71.7	[66.4–77.1]	51.4	[40.2–62.5]	32.1	[21.6–42.6]	27.9	[17.4–38.4]	11.0	[3.7–18.4]	12.0	[4.1–19.9]	9.3	[2.7–15.9]	4.4	[0.0–8.7]
First language learned to speak as a child																
Non-English	70.5	[67.5–73.5]	40.0	[34.4–45.6]	42.6	[36.3–48.8]	31.6	[26.5–36.6]	13.5	[9.4–17.5]	15.1	[10.5–19.7]	16.5	[12.8–20.1]	8.6	[5.4–11.7]
English	73.2	[71.9–74.4]	57.9	[55.3–60.5]	40.1	[37.5–42.8]	23.1	[20.9–25.4]	11.1	[9.4–12.9]	9.5	[7.9–11.0]	7.7	[6.3–9.1]	4.2	[3.1–5.3]
Highest level of parents' education																
High school or less	73.1	[70.7–75.4]	42.2	[37.5–47.0]	34.8	[29.7–40.0]	30.9	[26.3–35.5]	10.3	[7.7–12.9]	13.9	[10.0–17.7]	17.0	[13.2–20.7]	6.7	[4.1–9.4]
Some college	74.4	[72.4–76.3]	48.3	[44.1–52.6]	34.5	[30.8–38.3]	27.1	[22.9–31.2]	11.2	[8.3–14.0]	10.5	[7.9–13.1]	10.0	[7.6–12.3]	4.5	[2.9–6.2]
College graduation	73.3	[71.1–75.5]	61.7	[57.2–66.2]	42.3	[37.4–47.2]	24.3	[20.2–28.5]	11.5	[8.5–14.5]	9.4	[6.6–12.3]	6.3	[4.0–8.6]	4.1	[2.3–6.0]
Graduate/professional degree	69.2	[66.6–71.9]	70.9	[66.5–75.3]	52.4	[47.0–57.9]	14.2	[10.8–17.6]	13.0	[10.0–16.0]	7.5	[5.1–9.9]	2.7	[1.1–4.3]	4.1	[2.4–5.9]

See notes at end of table.

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Table 5. Among 2004 high school seniors who had applied to college by 2006, percentage who applied for financial aid, and among those who did not apply, percentage who reported various reasons for not doing so, by selected student, family, and high school characteristics: 2006—Continued

Selected student, family, and high school characteristics	Reasons for not applying for financial aid															
	Students who applied for financial aid		I or my family were able to pay for education without financial aid		I or my family thought that I would not qualify for aid		Other reason		I was offered aid without applying		The aid application process was too difficult		I or my family could not afford to pay back a loan		I or my family did not want to report financial information	
	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI
Family income in 2001																
\$35,000 or lower	76.3	[74.4–78.3]	38.7	[34.3–43.1]	26.2	[22.0–30.5]	35.7	[31.1–40.3]	12.5	[9.1–16.0]	15.0	[11.1–18.8]	17.3	[14.2–20.3]	7.0	[4.7–9.4]
\$35,001–75,000	76.3	[74.6–78.1]	51.7	[47.9–55.4]	39.5	[35.5–43.4]	28.4	[24.9–31.8]	9.7	[7.4–11.9]	10.9	[8.5–13.3]	9.3	[7.2–11.5]	4.6	[2.7–6.4]
More than \$75,000	65.1	[62.9–67.3]	68.7	[65.1–72.2]	50.1	[46.5–53.8]	13.9	[11.1–16.7]	12.4	[10.1–14.8]	6.9	[4.9–9.0]	3.5	[2.0–5.0]	3.7	[2.4–4.9]
Family composition																
Mother and father	71.8	[70.5–73.2]	60.4	[57.8–63.0]	45.4	[42.3–48.5]	20.0	[17.7–22.3]	12.0	[10.2–13.8]	8.9	[7.2–10.6]	6.9	[5.5–8.4]	5.0	[3.8–6.2]
Mother or father and guardian	72.1	[69.2–75.1]	49.1	[42.8–55.4]	35.3	[29.2–41.3]	29.8	[24.3–35.3]	8.7	[5.4–12.0]	9.5	[5.9–13.2]	10.8	[7.0–14.5]	4.6	[1.9–7.2]
Single parent (mother or father)	76.2	[73.8–78.5]	45.8	[39.9–51.7]	29.5	[24.7–34.3]	35.3	[30.0–40.7]	12.3	[8.5–16.1]	14.7	[10.4–18.9]	12.8	[9.2–16.3]	4.4	[2.1–6.7]
Other	73.8	[67.9–79.6]	32.4	[18.8–45.9]	25.2	[14.2–36.2]	28.3	[16.5–40.2]	8.3	[3.8–12.9]	18.3	[8.2–28.4]	20.7	[10.5–30.8]	4.3	[0.0–8.7]
Highest mathematics course level																
Pre-algebra or below	57.8	[51.3–64.3]	40.9	[31.0–50.8]	35.2	[24.4–46.0]	29.7	[20.6–38.8]	13.1	[6.4–19.8]	8.9	[3.2–14.6]	20.9	[11.7–30.2]	9.8	[3.3–16.3]
Algebra I/geometry	60.6	[57.1–64.0]	47.0	[41.6–52.3]	30.8	[26.5–35.1]	31.8	[27.4–36.3]	6.4	[3.9–9.0]	10.6	[7.2–14.1]	12.9	[9.9–15.9]	5.8	[3.4–8.2]
Algebra II	71.4	[69.1–73.8]	56.0	[51.4–60.6]	36.5	[31.6–41.3]	24.7	[20.2–29.1]	10.3	[7.2–13.4]	10.4	[7.4–13.4]	8.9	[6.3–11.4]	3.4	[1.8–4.9]
Trigonometry/analytic geometry/statistics	73.2	[70.6–75.8]	62.6	[57.4–67.9]	43.8	[37.9–49.7]	19.3	[14.8–23.8]	12.4	[8.6–16.2]	11.5	[8.0–14.9]	8.1	[5.3–10.9]	5.2	[2.7–7.7]
Pre-calculus/calculus	80.5	[78.8–82.2]	58.8	[54.2–63.5]	50.6	[45.8–55.5]	19.4	[15.5–23.3]	15.4	[12.3–18.4]	9.1	[6.4–11.8]	2.8	[1.4–4.3]	4.3	[2.6–6.0]

See notes at end of table.

National Center for Education Statistics

Table 5. Among 2004 high school seniors who had applied to college by 2006, percentage who applied for financial aid, and among those who did not apply, percentage who reported various reasons for not doing so, by selected student, family, and high school characteristics: 2006—Continued

Selected student, family, and high school characteristics	Reasons for not applying for financial aid															
	Students who applied for financial aid		I or my family were able to pay for education without financial aid		I or my family thought that I would not qualify for aid		Other reason		I was offered aid without applying		The aid application process was too difficult		I or my family could not afford to pay back a loan		I or my family did not want to report financial information	
	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI
Highest science course level																
Low-level science	55.5	[47.8–63.3]	31.4	[21.0–41.9]	27.1	[14.7–39.4]	36.9	[24.1–49.8]	9.4	[3.5–15.2]	10.5	[1.9–19.1]	26.9	[13.6–40.1]	3.5	[0.1–6.9]
Secondary physical science/ basic biology	62.6	[55.8–69.5]	54.4	[42.8–66.0]	28.7	[16.5–40.8]	22.9	[13.3–32.5]	10.6	[3.1–18.1]	15.9	[7.0–24.8]	14.7	[5.4–24.1]	12.6	[3.3–21.9]
General biology	64.4	[61.3–67.5]	50.7	[46.5–54.9]	31.5	[27.3–35.6]	31.3	[27.3–35.3]	9.6	[7.1–12.0]	10.4	[7.2–13.6]	10.6	[8.0–13.2]	4.0	[2.2–5.7]
Chemistry I or physics I	73.9	[72.0–75.8]	57.5	[53.2–61.8]	44.6	[40.2–48.9]	22.8	[19.2–26.5]	11.2	[8.5–14.0]	9.9	[7.4–12.5]	8.8	[6.6–11.0]	5.3	[3.4–7.3]
Chemistry I and physics I	76.8	[74.3–79.4]	56.5	[51.1–61.9]	44.0	[38.1–49.9]	19.9	[14.8–25.0]	10.5	[6.5–14.5]	10.6	[6.9–14.3]	2.9	[0.6–5.2]	3.6	[1.4–5.7]
Chemistry II, physics II, or advanced biology	80.0	[77.5–82.5]	62.8	[56.8–68.9]	49.2	[42.3–56.2]	15.3	[11.1–19.6]	16.1	[12.1–20.2]	8.6	[5.3–11.9]	5.4	[2.5–8.4]	5.8	[3.1–8.4]
High-level academic coursework																
Did not complete	69.6	[67.9–71.2]	52.7	[49.9–55.5]	35.8	[33.0–38.5]	26.5	[24.0–29.1]	10.1	[8.4–11.8]	10.5	[8.6–12.4]	10.5	[8.7–12.3]	5.0	[3.8–6.2]
Completed	79.6	[77.7–81.6]	62.1	[57.3–66.9]	53.6	[48.9–58.3]	17.4	[13.4–21.4]	14.7	[11.4–18.1]	9.3	[6.5–12.1]	3.4	[1.9–4.9]	4.6	[2.6–6.6]
Mathematics achievement test in senior year																
Lowest quarter	66.3	[63.5–69.0]	41.5	[36.8–46.3]	35.8	[31.1–40.4]	34.4	[30.0–38.8]	8.9	[6.7–11.2]	11.7	[8.6–14.9]	16.6	[13.0–20.2]	7.6	[5.2–10.1]
Middle two quarters	72.2	[70.5–73.9]	55.8	[52.6–58.9]	37.0	[33.8–40.3]	23.5	[20.7–26.4]	11.9	[9.6–14.2]	9.8	[7.9–11.8]	8.1	[6.4–9.8]	3.7	[2.4–5.0]
Highest quarter	78.0	[76.1–80.0]	67.4	[63.0–71.7]	52.1	[47.2–57.1]	16.5	[12.7–20.3]	13.1	[10.3–15.9]	10.0	[7.1–12.9]	3.4	[1.7–5.1]	4.3	[2.4–6.3]

See notes at end of table.

National Center for Education Statistics

Table 5. Among 2004 high school seniors who had applied to college by 2006, percentage who applied for financial aid, and among those who did not apply, percentage who reported various reasons for not doing so, by selected student, family, and high school characteristics: 2006—Continued

Selected student, family, and high school characteristics	Reasons for not applying for financial aid															
	Students who applied for financial aid		I or my family were able to pay for education without financial aid		I or my family thought that I would not qualify for aid		Other reason		I was offered aid without applying		The aid application process was too difficult		I or my family could not afford to pay back a loan		I or my family did not want to report financial information	
	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI
High school GPA																
2.0 or lower	57.2	[53.0–61.4]	44.8	[38.8–50.8]	27.8	[22.2–33.3]	34.3	[28.3–40.3]	8.0	[5.1–11.0]	10.2	[6.4–13.9]	13.0	[8.8–17.1]	3.4	[1.4–5.4]
2.1–3.0	67.0	[65.0–68.9]	54.4	[51.2–57.6]	38.5	[35.1–41.8]	25.1	[22.1–28.1]	9.7	[7.6–11.7]	10.4	[8.2–12.6]	10.5	[8.3–12.6]	6.1	[4.4–7.7]
Higher than 3.0	81.0	[79.4–82.6]	60.5	[56.5–64.6]	48.2	[43.4–53.0]	18.4	[15.0–21.8]	15.0	[11.7–18.3]	10.0	[7.3–12.7]	4.4	[2.7–6.1]	3.9	[2.3–5.5]
Parent's 2002 educational expectations for students																
High school or less	63.9	[56.7–71.1]	43.3	[27.2–59.4]	41.7	[26.6–56.8]	26.6	[15.2–38.0]	13.1	[2.6–23.6]	14.4	[2.4–26.4]	23.5	[10.5–36.5]	9.7	[1.2–18.3]
Some college	65.2	[60.2–70.2]	52.8	[44.1–61.5]	31.0	[23.0–39.0]	26.2	[18.3–34.2]	8.6	[4.7–12.5]	9.6	[4.9–14.2]	6.4	[2.9–9.9]	5.3	[1.5–9.0]
College graduation	70.3	[68.4–72.1]	54.5	[51.0–58.0]	39.0	[35.7–42.3]	25.2	[22.4–28.1]	11.2	[9.1–13.3]	9.4	[7.3–11.6]	9.8	[7.6–12.1]	5.2	[3.6–6.9]
Graduate/professional degree	76.7	[75.3–78.2]	58.7	[55.0–62.3]	44.2	[40.4–48.0]	22.1	[18.8–25.3]	12.5	[9.9–15.1]	10.8	[8.6–13.0]	7.2	[5.4–9.1]	4.0	[2.6–5.3]
Sector of high school last attended																
Public	73.5	[72.2–74.8]	53.3	[50.6–55.9]	39.2	[36.4–41.9]	25.7	[23.4–28.0]	10.9	[9.2–12.7]	10.8	[9.2–12.5]	9.7	[8.2–11.2]	4.8	[3.7–5.9]
Catholic	70.0	[67.0–73.1]	65.9	[60.4–71.5]	51.9	[46.3–57.6]	13.0	[9.4–16.6]	11.8	[7.5–16.1]	8.2	[5.8–10.7]	3.6	[1.4–5.8]	4.7	[2.8–6.7]
Other private	61.4	[56.8–66.0]	74.0	[69.0–79.0]	50.1	[43.7–56.5]	14.6	[10.1–19.2]	19.2	[14.8–23.7]	4.3	[2.5–6.1]	1.6	[0.1–3.2]	4.9	[1.7–8.1]

See notes at end of table.

National Center for Education Statistics

Table 5. Among 2004 high school seniors who had applied to college by 2006, percentage who applied for financial aid, and among those who did not apply, percentage who reported various reasons for not doing so, by selected student, family, and high school characteristics: 2006—Continued

Selected student, family, and high school characteristics	Reasons for not applying for financial aid															
	Students who applied for financial aid		I or my family were able to pay for education without financial aid		I or my family thought that I would not qualify for aid		Other reason		I was offered aid without applying		The aid application process was too difficult		I or my family could not afford to pay back a loan		I or my family did not want to report financial information	
	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI
Urbanicity of high school last attended																
Urban	72.6	[70.5–74.6]	55.8	[51.5–60.0]	42.1	[37.6–46.6]	23.4	[19.9–26.8]	11.3	[8.9–13.6]	12.6	[9.9–15.2]	11.7	[9.1–14.3]	5.0	[3.2–6.9]
Suburban	72.4	[70.7–74.0]	55.9	[52.3–59.4]	40.2	[36.7–43.7]	24.6	[21.8–27.4]	10.8	[8.7–12.9]	9.2	[7.2–11.2]	6.8	[5.0–8.6]	5.3	[3.7–6.8]
Rural	74.4	[71.7–77.1]	52.5	[47.5–57.5]	38.6	[33.6–43.6]	25.5	[19.6–31.3]	13.7	[8.8–18.7]	9.3	[5.8–12.8]	9.7	[6.3–13.0]	3.0	[1.3–4.6]

† Not applicable.

‡ Reporting standards not met. (Too few cases for a reliable estimate.)

¹ Black includes African American, Hispanic includes Latino, Asian includes Native Hawaiian or other Pacific Islander, and American Indian includes Alaska Native. All race categories exclude individuals of Hispanic or Latino origin.

NOTE: See the Technical Notes for the definition of 95% CI (confidence interval). This table shows, for example, that 72.8 percent of 2004 high school seniors who had applied to college by 2006 had applied for financial aid. Students could choose more than one reason. Estimates in this table are based on all high school seniors in spring 2004 who had applied to college by 2006.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Education Longitudinal Study of 2002 (ELS:02), "Base-year, 2002," "First Follow-up, 2004," and "Secondary Follow-up, 2006."

Glossary

This glossary includes descriptions of the variables used in the Issue Tables, all of which can be found in the Education Longitudinal Study of 2002 (ELS:02) database. Variables can be downloaded from the ELS:02/06 CD, which includes the restricted-use base-year, first follow-up, high school transcript data, and the electronic codebook. Information on the procedure for obtaining this CD is available at <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2008346>. The index below shows the variables organized by category. The glossary items are listed in alphabetical order in the text by variable name (displayed in bold letters along the right-hand column).

Glossary Index

Financial Concerns and Preparations

Importance of low college expenses to student in choosing an institution to attend	F1S52A
Importance of availability of financial aid to student in choosing an institution to attend	F1S52B
Importance of low college expenses to parent in choosing an institution to attend	BYP80A
Importance of availability of financial aid to parent in choosing an institution to attend	BYP80B
Parent started a savings account	BYP83A
Parent bought an insurance policy	BYP83B
Parent bought U.S. savings bonds	BYP83C
Parent invested in stocks or real estate	BYP83D
Parent set up a college investment fund	BYP83E
Parent planned to reduce other expenses	BYP83I
Student had ever applied for financial aid as of 2006	F2B04
Reasons for not applying for financial aid	
The aid application process was too difficult	F2B05A
I or my family thought I would not qualify for aid	F2B05B
I or my family could not afford to pay back a loan	F2B05C
I or my family was able to pay for my education without financial aid	F2B05D
I or my family did not want to report financial information	F2B05E
I was offered aid without applying	F2B05F
Other reason	F2B05G

Student Characteristics

Sex	F2SEX
Race/ethnicity	F1RACE
First language learned to speak as a child	F1STLANG

Family Background

Highest level of parent's education	F1PARED
Family income in 2001	BYINCOME

Family composition F1FCOMP

Academic Coursetaking and Performance in High School

Highest mathematics course taken F1RMAPIP

Highest science course taken F1RSCPIP

High-level academic coursework F1RACADC

High school GPA F1RGP

Mathematics achievement test scores in senior year F1TXMQU

Postsecondary Expectations and Plans

Highest level of education parent expected student to attain BYPARASP

Postsecondary plans and type of institution planned to attend after high school F1PSEPLN

High School Last Attended

Sector F1RSLCTR

Urbanicity F1RSLURB

Family income in 2001**BYINCOME**

This variable indicates the total family income parents earned from all sources in 2001. It was recoded into three levels of family income: \$35,000 or lower, \$35,001–75,000, and more than \$75,000.

Importance of low college expenses to parent in choosing an institution to attend **BYP80A**

This variable indicates how important the parent thinks low college expenses are in his or her child's choice of a school to attend after high school. This question was asked of parents in 2002. The parents of students in the 2004 freshened sample were not asked this question because the 2004 first follow-up study did not administer a parent survey. The original three categories (i.e., not important, somewhat important, and very important) were recoded into a dichotomous variable: very important, and not very or somewhat important.

Importance of availability of financial aid to parent in choosing an institution to attend **BYP80B**

This variable indicates how important the parent thinks the availability of financial aid such as a school loan, scholarship, or grant is in his or her child's choice of a school to attend after high school. This question was asked of parents in 2002. The parents of students in the 2004 freshened sample were not asked this question because the 2004 first follow-up study did not administer a parent survey. The original three categories (i.e., not important, somewhat important, and very important) were recoded into a dichotomous variable: very important, and not very or somewhat important.

Parent started a savings account **BYP83A**

This dichotomous variable indicates whether the parent had started a savings account as of 2002 to prepare for his or her child's education after high school. This question was not asked of the parents of students in the 2004 freshened sample because the 2004 first follow-up study did not administer a parent survey.

Parent bought an insurance policy **BYP83B**

This dichotomous variable indicates whether the parent had bought an insurance policy as of 2002 to prepare for his or her child's education after high school. This question was not asked of the parents of students in the 2004 freshened sample because the 2004 first follow-up study did not administer a parent survey.

Parent bought U.S. savings bonds **BYP83C**

This dichotomous variable indicates whether the parent had bought U.S. savings bonds as of 2002 to prepare for his or her child's education after high school. This question was not asked of the parents of students in the 2004 freshened sample because the 2004 first follow-up study did not administer a parent survey.

Parent invested in stocks or real estate **BYP83D**

This dichotomous variable indicates whether the parent had invested in stocks or real estate as of 2002 to prepare for his or her child's education after high school. This question was not asked of the parents of students in the 2004 freshened sample because the 2004 first follow-up study did not administer a parent survey.

Parent set up a college investment fund **BYP83E**

This dichotomous variable indicates whether the parent had set up a college investment fund as of 2002 to prepare for his or her child's education after high school. This question was not asked of the parents of students in the 2004 freshened sample because the 2004 first follow-up study did not administer a parent survey.

Parent planned to reduce other expenses**BYP83I**

This dichotomous variable indicates whether the parent had planned to reduce other expenses as of 2002 to prepare for his or her child's education after high school. This question was not asked of the parents of students in the 2004 freshened sample because the 2004 first follow-up study did not administer a parent survey.

Highest level of education parent expected student to attain**BYPARASP**

This variable indicates the highest level of education the parent expected his or her child to attain after high school. Parents were asked about their expectations for their child's education when their child was in the sophomore year in 2002. If missing, the variable was imputed. This variable was recoded into four categories: high school or less, some college, college graduation, and graduate/professional degree.

Family composition**F1FCOMP**

This variable indicates the student's family composition and was constructed using the reports of parents in 2002 and supplemented by the reports of the first follow-up student participants (freshening sample) in 2004. It was recoded into four categories: mother and father, mother or father and guardian, single parent (mother or father), and other.

Highest level of parent's education**F1PARED**

This variable indicates the highest level of education reported by either parent in 2002. If missing, parents' education reported by students in the 2004 first follow-up survey was used. This variable was recoded into four categories: high school or less, some college, college graduation, and graduate/professional degree.

Postsecondary plans and type of institution planned to attend after high school**F1PSEPLN**

This variable indicates whether a student planned to continue his or her education after high school and what type of postsecondary institution he or she planned to attend. This variable contains five categories: do not plan to continue; do not know if I would continue; plan to attend a 4-year postsecondary institution; plan to attend a 2-year community college; and plan to attend a vocational, technical, or trade school. The categories for planning to attend various types of institutions were combined to create a category indicating whether or not students planned to continue education after high school.

High-level academic coursework**F1RACADC**

This transcript-based dichotomous variable indicates whether a student completed high-level academic coursework in high school. High-level academic coursework consists of 4 years of English; 3 years of mathematics (including at least 1 year of a course higher than algebra II); 3 years of science (including at least 1 year of a course higher than biology); 3 years of social studies (including at least 1 year of U.S. or world history); and 2 years of a single non-English language. Course classifications are based upon the 1998 revision of the Secondary School Taxonomy.

Race/ethnicity**F1RACE**

This variable indicates the student's race/ethnicity and is recoded to contain the following categories: White, Black (including African American), Hispanic (including Latino), Asian (including Native Hawaiian or other Pacific Islander), American Indian (including Alaska Native), and two or more races. All race categories exclude individuals of Hispanic or Latino origin.

High school GPA F1RGP
 This transcript-based variable indicates a student's overall grade point average (GPA) based on all courses taken from 9th through 12th grade. It was recoded into the following categories: 2.0 or lower, 2.1–3.0, and higher than 3.0.

Highest mathematics course taken F1RMAPIP
 This transcript-based variable indicates the highest mathematics course taken by a student during high school. It was recoded into the following categories: pre-algebra or below, algebra I/geometry, algebra II, trigonometry/analytic geometry/statistics, and pre-calculus/calculus.

Highest science course taken F1RSCPIP
 This transcript-based variable indicates the highest science course taken by a student during high school. It was recoded into the following categories: low-level science, secondary physical science/basic biology, general biology, chemistry I/physics I, chemistry I and physics I, chemistry II/physics II/advanced biology.

Sector F1RSLCTR
 This transcript-based variable indicates the sector of high school that a student last attended in 2004 and contains three categories: public, Catholic, and other private school.

Urbanicity F1RSLURB
 This transcript-based variable indicates the urbanicity of the high school that a student last attended in 2004 and contains three categories: urban (school is in a large or mid-size central city); suburban (school is in a large or small town or is on the urban fringe of a large or mid-size city); and rural (school is in a rural area). NCES used the Common Core of Data (CCD) locale codes for public schools.

Importance of low college expenses to student in choosing an institution to attend F1S52A
 This variable indicates how important the student thinks low college expenses are in his or her choice of a school to attend after high school. The original three categories (i.e., not important, somewhat important, and very important) were recoded into a dichotomous variable: very important, and not very or somewhat important.

Importance of availability of financial aid to student in choosing an institution to attend F1S52B
 This variable indicates how important the student thinks the availability of financial aid such as a school loan, scholarship, or grant is in his or her choice of a school to attend after high school. The original three categories (i.e., not important, somewhat important, and very important) were recoded into a dichotomous variable: very important, and not very or somewhat important.

First language learned to speak as a child F1STLANG
 This dichotomous variable indicates whether the first language a student learned to speak as a child was English or non-English.

Mathematics achievement test scores in senior year F1TXMQU
 This variable indicates mathematics achievement test scores and contains four categories: lowest quartile, second quartile, third quartile, and highest quartile.

Student had ever applied for financial aid as of 2006 F2B04
 This dichotomous variable indicates whether a student or family had applied for financial aid such as grants, scholarships, fellowships, loans, or work-study to help pay for the student's postsecondary education as of 2006.

Reasons for not applying for financial aid: the aid application process was too difficult F2B05A

This dichotomous variable indicates the following reason cited by the student for not applying for financial aid: the aid application process was too difficult.

Reasons for not applying for financial aid: I or my family thought I would not qualify for aid F2B05B

This dichotomous variable indicates the following reason cited by the student for not applying for financial aid: I or my family thought I would not qualify for aid.

Reasons for not applying for financial aid: I or my family could not afford to pay back a loan F2B05C

This dichotomous variable indicates the following reason cited by the student for not applying for financial aid: I or my family could not afford to pay back a loan.

Reasons for not applying for financial aid: I or my family was able to pay for my education without financial aid F2B05D

This dichotomous variable indicates the following reason cited by the student for not applying for financial aid: I or my family was able to pay for my education without financial aid.

Reasons for not applying for financial aid: I or my family did not want to report financial information F2B05E

This dichotomous variable indicates the following reason cited by the student for not applying for financial aid: I or my family did not want to report financial information.

Reasons for not applying for financial aid: I was offered aid without applying F2B05F

This dichotomous variable indicates the following reason cited by student for not applying for financial aid: I was offered aid without applying.

Reasons for not applying for financial aid: Other reason F2B05G

This dichotomous variable indicates the following reason cited by the student for not applying for financial aid: other reason not listed above.

Sex F2SEX

This dichotomous variable indicates a student's sex: male or female.

Technical Notes

Confidence Intervals

Definition

The confidence interval (CI) is one way of expressing the uncertainty of a sample estimate of a statistic due to sampling variation. Confidence intervals (with a lower and upper bound) for a sample estimate can be constructed such that if we drew repeated samples from the same population many times, we would expect a certain percentage of the estimates from these samples to fall within the interval. For example, a 95% confidence interval is constructed and expressed as:

$$C(\bar{X}_i - 1.96S_i < \bar{X} < \bar{X}_i + 1.96S_i) = 95\% \quad (1)$$

where \bar{X}_i is the estimated mean of the specific (i^{th}) sample being used, \bar{X} is any of the estimated means from possible replicated samples, S_i is the sample estimate of the standard error of the mean constructed from the sample being used, and 1.96 is a t or z (normal) distribution constant for the 95% probability.

Note that in equation (1), 95% refers to the confidence, not the probability.

Special Bounding Conditions in Constructing Confidence Intervals

CIs are bound at the minimum and maximum possible values for percentages and at the minimum possible value for amounts. This means that the CIs are bound at zero at the lower bound for both percentages and amounts, and at 100 at the upper bound for percentages. This bounding may result in asymmetrical intervals. Bounding will be apparent for low estimates (i.e., near zero) or high estimates (i.e., near 100 percent or near the maximum possible amount).

CIs and Hypothesis Testing (or Overlapping CIs and Statistical Significance)

Can two CIs constructed for estimates of the same statistic from two different populations be used to determine if the two estimates are statistically significantly

different (say, in place of doing a hypothesis test)? The answer is: sometimes but not always.

In the case of two *non-overlapping CIs*, the difference between the estimates is necessarily statistically significant. If 95% CIs are being used, then the estimates are significantly different with $p \leq 0.05$. This is equivalent to doing a t -test (or z -test if comparing proportions) with $\alpha = 0.05$ and rejecting the null hypothesis of equality.

However, in the case of two *overlapping CIs*, the estimates can be either significant or not significant. An assumption that overlapping CIs necessarily indicate non-significance is false. In this case a hypothesis test must be done, and under some conditions the test can find that the *estimates are indeed significantly different despite their overlapping CIs*.

Here is an *explanation* of why this happens. For two 95% CIs constructed as in equation (1), the algebraic relationships constrain the CIs so that they can only overlap when:

$$(\bar{X}_1 - \bar{X}_2) \leq 1.96(S_1 + S_2). \quad (2)$$

Similarly, the CIs cannot overlap when:

$$(\bar{X}_1 - \bar{X}_2) > 1.96(S_1 + S_2). \quad (3)$$

The formula for a t -test of the difference between two means is:

$$t = \frac{(\bar{X}_1 - \bar{X}_2)}{1.96\sqrt{(S_1^2 + S_2^2)}}. \quad (4)$$

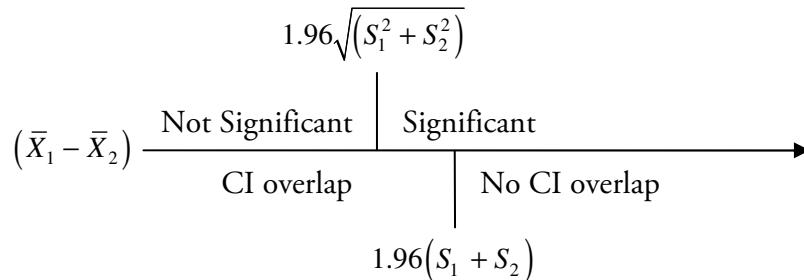
The means are significantly different when:

$$(\bar{X}_1 - \bar{X}_2) > 1.96\sqrt{(S_1^2 + S_2^2)}. \quad (5)$$

This is because, algebraically, the square root of the sum of squares of two numbers is always less than the sum of those two numbers:

$$\sqrt{S_1^2 + S_2^2} < S_1 + S_2, \quad (6)$$

and as the difference in means $(\bar{X}_1 - \bar{X}_2)$ increases, it becomes significantly different before the two confidence intervals cease to overlap. Refer to the following figure.



The figure demonstrates that there is an interval of values of $(\bar{X}_1 - \bar{X}_2)$ where the difference is significant and the CIs overlap. Thus,

- while non-overlapping CIs do indicate a significant difference,
- overlapping CIs *do not* indicate non-significance.¹

Data Analysis

The Education Longitudinal Study of 2002 (ELS:02) sample design involved stratification, the disproportionate sampling of certain strata, and multistage probability sampling. The resulting statistics are more variable than they would have been if they had been based on data from a simple random sample of the same size. As a result, simple random sample techniques for estimating sampling errors cannot be applied to these data. Several methods such as Taylor Series approximations, Balanced Repeated Replication, and Jackknife Repeated Replication can be used to estimate correct standard errors. This set of Issue Tables used a SAS macro to call SUDAAN (an advanced statistical program that takes into account the complex sampling design) and applied the Taylor Series approximation method to generate appropriate standard errors for the complex sampling designs used by ELS:02.

¹ For more detailed discussions of nonoverlapping CIs, see Cornell University, Cornell Statistical Consulting Unit (2008, October), Overlapping Confidence Intervals and Statistical Significance, *StatNews*, 73 (retrieved October 29, 2009, from <http://www.cscu.cornell.edu/news/archive.php>) or Wolfe, R., and Hanley, J. (2002), If We're So Different, Why Do We Keep Overlapping? When 1 Plus 1 Doesn't Make 2, *Canadian Medical Journal*, 166(1): 65–66.

Dataset Methodology

For an overview of the ELS:02 survey methodology, see the *Education Longitudinal Study of 2002 (ELS:02) Base-Year to Second Follow-up Public Use Data File Document* (NCES 2008-347), available at <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2008347>.

Quality of Estimates: Unit Response Rates and Bias Analysis

NCES Statistical Standard 4-4-1 states that “Any survey stage of data collection with a unit or item response rate less than 85 percent must be evaluated for the potential magnitude of nonresponse bias before the data or any analysis using the data may be released” (U.S. Department of Education 2003). From the selected sample, weighted item response rates were calculated for all variables used in this set of Issue Tables by dividing the weighted number of valid responses by the weighted population for which the item was applicable. All items included in this set of Issue Tables have a response rate of more than 85 percent.